



COMMONWEALTH OF  
PUERTO RICO  
Environmental Quality Board

May 16, 2016

Mr. Ramón Torres, Chief  
Response and Remediation Branch  
Caribbean Environmental Protection Division  
City View Plaza II - Suite 7000  
Guaynabo, PR 00968-8069

RE: Field Oversight Report  
Injection Wells Installation Event  
Former Hewlett Packard Voluntary Remediation Project  
San Germán, Puerto Rico  
EPA ID PRD991291857

Dear Mr. Torres:

The Land Pollution Control Area hereby submits a Field Oversight Report of the March 2016 injection wells installation activities conducted at the former Hewlett-Packard Company Voluntary Remediation Project, also known as PCB Horizon Technologies at San Germán, Puerto Rico.

Enclosed for your information, please find EQB Field Oversight Report. If you have any questions, please contact Gloria M. Toro Agrait, of my staff at phone number (787) 767-8181, extension 3586 or 787-833-1188.

Cordially,



Nilda Del Mar Sánchez Santiago, Esq.  
Manager  
Land Pollution Control Area

cc. Jesse Avilés, USEPA-CEPD



COMMONWEALTH OF  
PUERTO RICO  
Environmental Quality Board

FIELD OVERSIGHT REPORT

Facility name: Hewlett-Packard Company Voluntary Remediation Project

Field activity: Oversight of Injection Wells Installation Activities

Oversight date: March 7, 2016

Reported by: Gloria M. Toro Agrait

---

INTRODUCTION

On March 7, 2016, personnel from the Hazardous Waste Permits Division (HWPD) of the Land Pollution Control Area performed a field oversight of the injection wells installation at the former Hewlett-Packard Company Voluntary Remediation Project facility. The site is located at State Road 362 in San Germán, Puerto Rico. Such activities were been conducted as part of the Hewlett-Packard Voluntary Remediation Project.

The injection wells specifications are outlined in the Revised Final Intrinsic Biodegradation Study Work Plan (IBSWP), dated October, 2015. The IBSWP was approved by EQB on November 2, 2015. The work plan was used as a guide during the field oversight.

Hewlett-Packard Company (HP) contracted the firm GZA GeoEnvironmental, Inc. (GZA) to perform the activities at the site.

WELL INSTALLATION OVERSIGHT

On March 7, 2016 the installation of injection well IW-1 was observed. For the well drilling and installation GZA and AMF Drilling were contracted. The following personnel were on the field:

- 1) James Roering, GZA
- 2) Matt Dion, GZA
- 3) Hermes Chacón, On-Site Environmental
- 4) Miguel Ferrer, AMF Drilling

- 5) Christian Burgos, AMF Drilling
- 6) Juan Carlos Calderon, AMF Drilling
- 7) Gloria M. Toro - PREQB

Upon arrival to the site at 11:00 AM everyone on site were required to sign the Daily Safety Sheet after a safety briefing.

Three injection wells were going to be installed for the use of injecting carbon-amended water and bioaugmentation culture into the subsurface. Two shallow injection wells, IW-2 and IW-3, were going to be approximately 30 to 40 feet deep and located 20 to 30 feet east and upgradient of monitoring well OW-307, parallel with estimated groundwater contours. One shallow injection well, IW-1, will be approximately 15 to 20 feet deep and located 20 to 30 feet east and upgradient of monitoring well OW-101. The approximate locations of the injection wells are shown in Figure 1 (IBSWP, 2015). Permits were obtained for the installation of the proposed injection wells and for the proposed subsurface injections. Clearance of utilities were performed on March 4, 2016. Equipment mobilization and preparation was observed. The following activities were observed:

- Once determined the location of the well, the drilling personnel started the drilling process manually, until reaching 4 ft depth. See photos #1 and #2.
- The soil coming out of the hole was contained in 55 gallons drums. See photo #3.
- Assembly of the drill rig was prepared. See photos #4 and #5
- Using the 4 in drilling rod the drilling begins. See photo #6.
- Finally, the well goes down to 20 ft and water was encountered.
- Using 20 ft of 4 in diameter piping the injection well was installed. See photos #7 and #8.
- Once the piping completed, the annular space was filled with 12 ft of sand (see photo #9), 8 ft of bentonite and wetted with water (see photos #10 and #11) and completed with cement.
- The cover and casing of the monitoring well was going to be installed the next day to allow time for the pipe to settle.

The HWPD personnel leave the site at 4:30 PM.



Figure 1

## CONCLUSION

The injection well installation observed was performed in accordance with the approved IBSWP.





Photographic Log

Site: HP Voluntary Cleanup  
Project

Photo  
No. 1

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857



Photographic Log

Site: HP Voluntary Cleanup  
Project

Photo  
No. 2

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857







## Photographic Log

Site: HP Voluntary Cleanup Project

Photo No. 3

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857



## Photographic Log

Site: HP Voluntary Cleanup Project

Photo No. 4

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857





## Photographic Log

Site: HP Voluntary Cleanup Project

Photo  
No. 5

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857



## Photographic Log

Site: HP Voluntary Cleanup Project

Photo  
No. 6

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857







Photographic Log

Site: HP Voluntary Cleanup  
Project

Photo  
No. 7

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857



Photographic Log

Site: HP Voluntary Cleanup  
Project

Photo  
No. 8

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857







## Photographic Log

Site: HP Voluntary Cleanup Project

Photo No. 9

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857



## Photographic Log

Site: HP Voluntary Cleanup Project

Photo No. 10

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857





Photographic Log

Site: HP Voluntary Cleanup  
Project

Photo  
No. 11

Date: 3/7/2016

Location: San German, PR

EPA ID No.:  
PRD991291857

